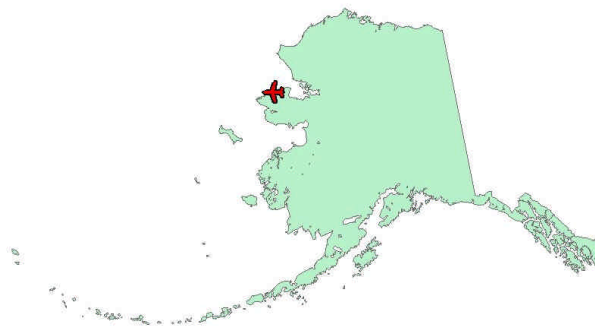


SHISHMAREF AIRPORT



2004 Alaska Airport Pavement Condition Report

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Maps and report compiled by
H. June Finkbiner
Central Region Materials, Alaska DOT&PF

SHISHMAREF AIRPORT - 2004

Contents:

- A Pavement Strength Form showing project history, latest Pavement Condition Index (PCI) data, pavement strength ratings (if available) and other useful information
- A Pavement Condition Survey – PCI Sample Unit Layout Plan
- PCI maps showing as-measured and predicted pavement conditions
- Age map showing pavement age as of January 2004
- A Branch PCI Condition Report
- A Section PCI Condition Report

Airport Information:

- Location:

Shishmaref Airport is located just southwest of the village of Shishmaref, Alaska. It is on a sand spit on the northern coast of the Seward Peninsula in western Alaska. It is a General Aviation airport primarily serving commercial airplanes. The Runway is designated as 5-33 with Bituminous Surface Treatment (BST) measuring approximately 5,000' x 77' and a turn around at each end. There is a perpendicular Taxiway A, located near the east end of the runway that connects to an apron on the north side. The Taxiway and Apron are also BST surfaced.
- District: Western, Northern Region
- Airport Manager: Patrick Kelliher
- District Maintenance Manager: Patrick Kelliher
- Pavement Surface: Bituminous Surface Treatment
- Last Pavement Construction: 1993
- Pavement layout:

Aircraft operations areas consist of approximately 532,000 square feet of BST. The Runway, Taxiway A and Apron were last surfaced in 1993. The 1993 project provided BST surfacing of a sand asphalt pavement and expansion of the apron. A BST surfaced turnaround may is located on either end of the runway.
- Design Aircraft: General Aviation
- 2003 Enplanements: 4,250 – up 43% from 2002
- Airport Class: Non-Primary
- Last pavement condition survey: 2004
conducted by Angela Parsons and Roy Stover of Central Region Materials
- Next planned pavement condition survey: 2007
- 2004 reported pavement maintenance and/or changed conditions: Extensive crack sealing and cold mix patching done in 2004, prior to the condition survey.
- Recommendations: Two lift hot asphalt paving, see PCI maps



Date: 9 /27/2004	Branch Condition Report <i>Pavement Database: NetworkID: Shishmaref</i>	1 of 2
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Date: 9 /27/2004	Branch Condition Report <i>Pavement Database: NetworkID: Shishmaref</i>	1 of 2
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Date: 9 /27/2004	Branch Condition Report <i>Pavement Database: NetworkID: Shishmaref</i>	1 of 2
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Date: 9 /27/2004	Branch Condition Report <i>Pavement Database: NetworkID: Shishmaref</i>	1 of 2
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Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
100 (TAXIWAY A)	1	262.00	39.00	12364.00	TAXIWAY	38.00	0.00	38.00
4100 (APRON)	1	200.00	193.00	38600.00	APRON	49.00	0.00	49.00
6100 (RUNWAY 5-23)	5	5400.00	85.00	438000.01	RUNWAY	31.60	13.98	23.59

Date: 9 /27/2004

Branch Condition Report

2 of 2

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	1	38600.00	49.00	0.00	49.00
RUNWAY	5	438000.01	31.60	13.98	23.59
TAXIWAY	1	12364.00	38.00	0.00	38.00
All	7	488964.01	35.00	13.31	25.96

Date: 9 /27/2004

Section Condition Report

1 of 2

Pavement Database: NetworkID: Shishmaref

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
100 (TAXIWAY A)	100-01	07/14/1993	ST	TAXIWAY	P	0	12364.00	07/01/2004	11	38.00
4100 (APRON)	4100-01	07/14/1993	ST	APRON	P	0	38600.00	07/01/2004	11	49.00
6100 (RUNWAY 5-23)	6100-01	07/14/1993	ST	RUNWAY	P	0	75000.00	07/01/2004	11	23.00
6100 (RUNWAY 5-23)	6100-02	07/14/1993	ST	RUNWAY	P	0	225000.01	07/01/2004	11	18.00
6100 (RUNWAY 5-23)	6100-03	07/14/1993	ST	RUNWAY	P	0	75000.00	07/01/2004	11	20.00
6100 (RUNWAY 5-23)	6100-04	07/14/1993	ST	RUNWAY	S	0	31500.00	07/01/2004	11	51.00
6100 (RUNWAY 5-23)	6100-05	07/14/1993	ST	RUNWAY	S	0	31500.00	07/01/2004	11	46.00

Date: 9 /27/2004

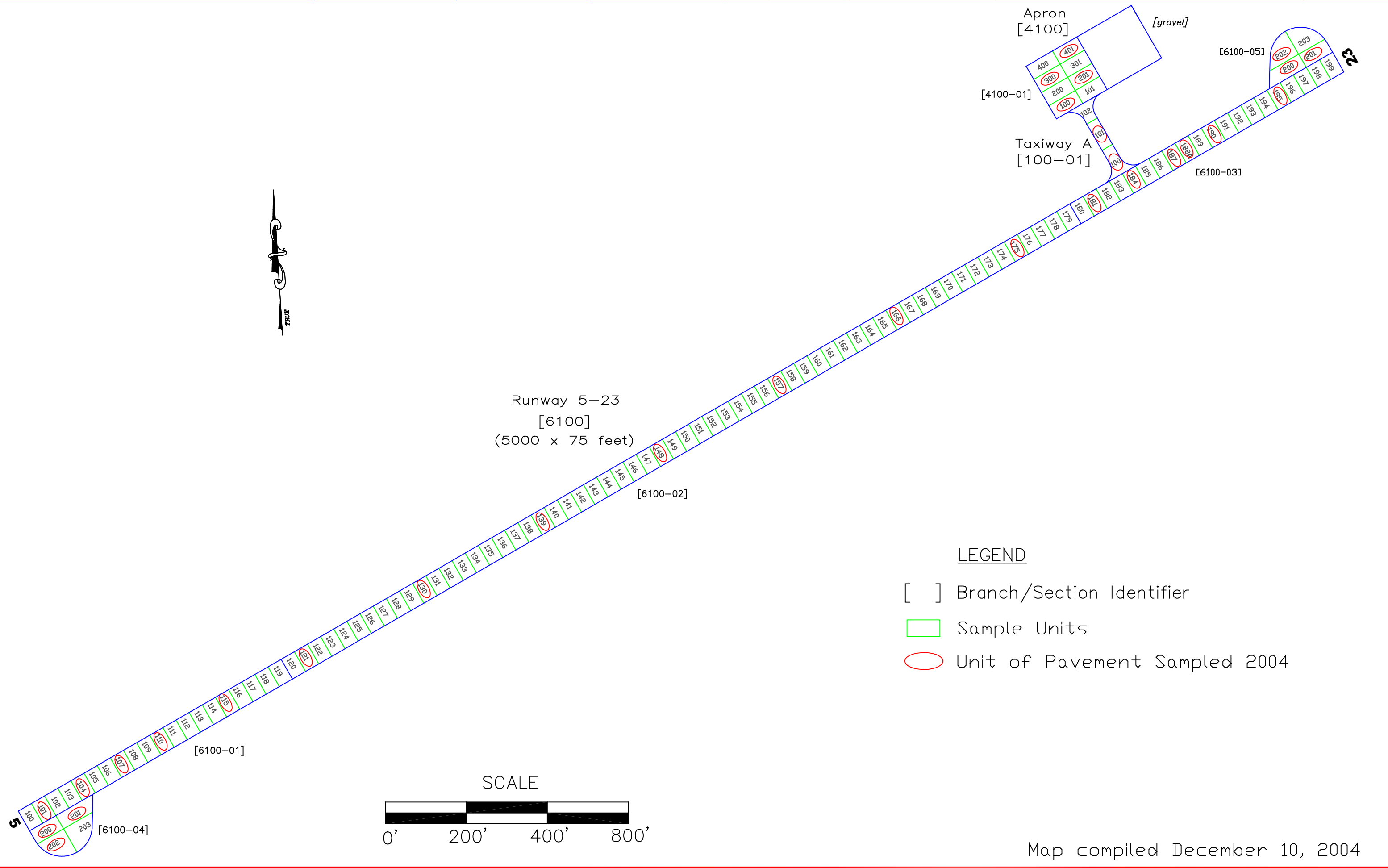
Section Condition Report

2 of 2

Pavement Database:

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
11-15	11.00	488964.01	7	35.00	13.31	25.96
All	11.00	488964.01	7	35.00	13.31	25.96

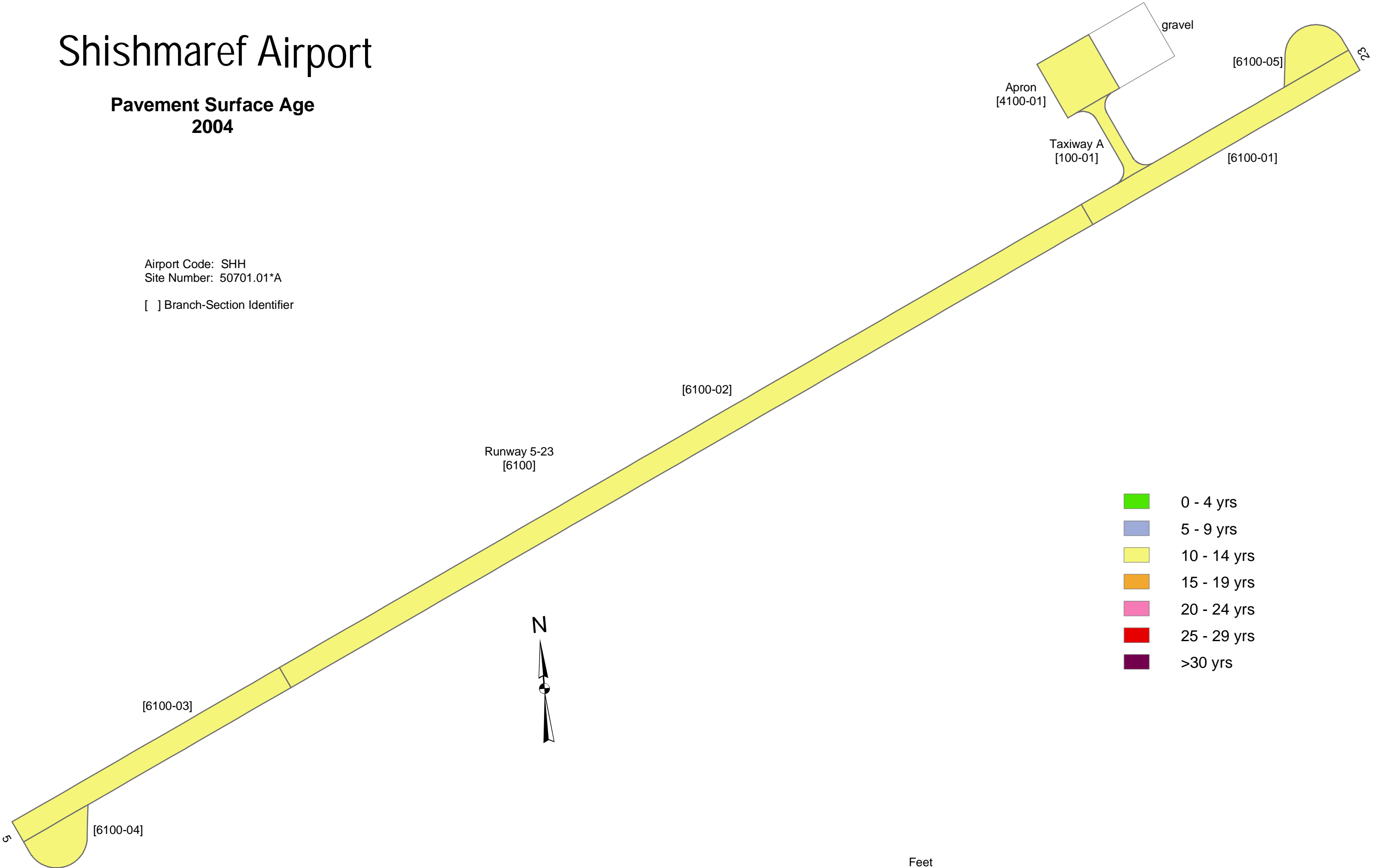
		PAVEMENT STRENGTH SURVEY											
STATE Alaska		CITY	Shishmaref	AIRPORT	Shishmaref			This is a variation of FAA Form 5320-1-1					
		CONSTRUCTION DATES											
IDENT.	NAME	ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Existing Pavement Conditions (PCI) at last inspection	Soil Class	Subbase Course	Base Course	Surface Course	Overlay	Pavement Strength	
RUNWAYS													
6100-01	West Section Runway 5-23	1983	1993	AK DOT&PF		23		Sand	GeoWeb Sand	Sand Asphalt	AST	S12.5	
6100-02	Middle Section Runway 5-23	1983	1993	AK DOT&PF		18		Sand	GeoWeb sand	Sand Asphalt	AST	S12.5	
6100-03	East Section Runway 5-23	1983	1993	AK DOT&PF		20		Sand	GeoWeb Sand	Sand Asphalt	AST	S12.5	
6100-04	Turn Around West	1983	1993	AK DOT&PF		51		Sand	GeoWeb Sand	Sand Asphalt	AST	S12.5	
6100-05	Turn Around East	1983	1993	AK DOT&PF		46		Sand	GeoWeb Sand	Sand Asphalt	AST	S12.5	
TAXIWAYS													
100-01	Taxiway A	1983	1993	AK DOT&PF		38		Sand	GeoWeb Sand	Sand Asphalt	AST		
APRONS													
4100-01	Apron section 1	1983	1993	AK DOT&PF		49		Sand	GeoWeb Sand	Sand Asphalt	AST		
REMARKS:													
Occasional larger aircraft use this in winter													
Patched and Crack Sealed in 2004, prior to survey													
Date of Site Inspection:	7/1/2004			Evaluated By:	S. Gartin	5/11/2005						PAGE 1 of 1	



Shishmaref Airport

Pavement Surface Age 2004

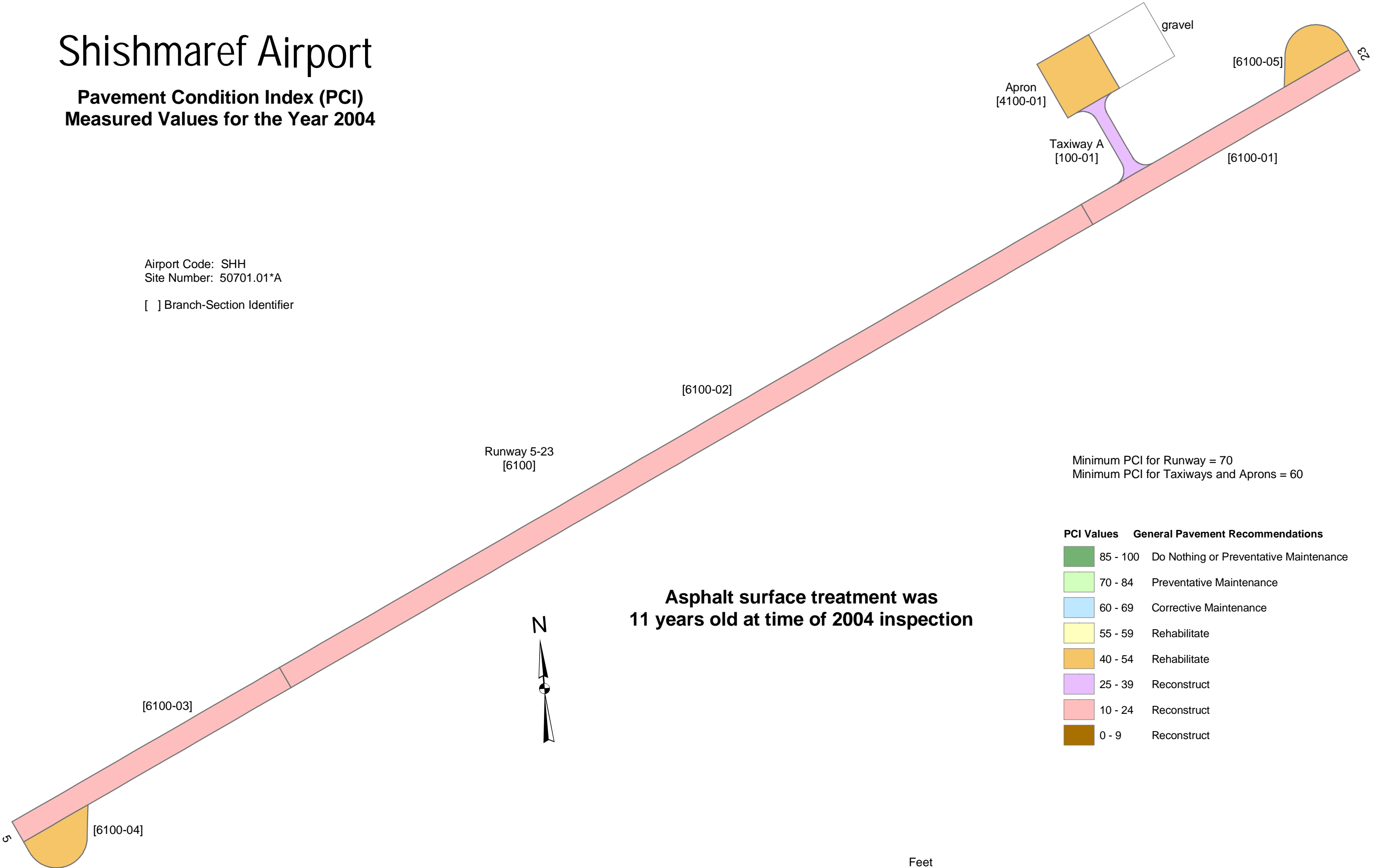
Airport Code: SHH
Site Number: 50701.01*A
[] Branch-Section Identifier



Shishmaref Airport

Pavement Condition Index (PCI) Measured Values for the Year 2004

Airport Code: SHH
Site Number: 50701.01*A
[] Branch-Section Identifier



Minimum PCI for Runway = 70
Minimum PCI for Taxiways and Aprons = 60

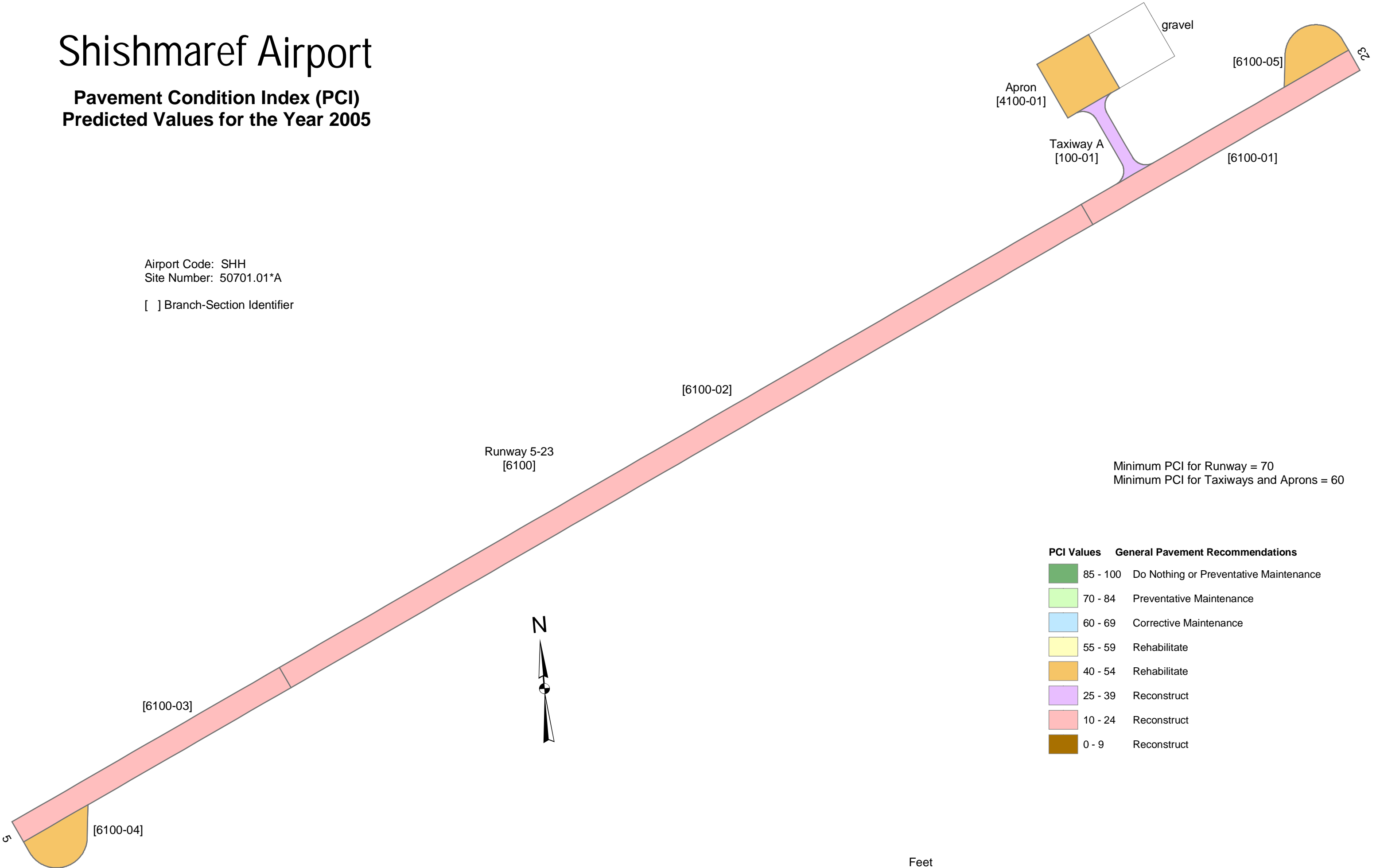
PCI Values		General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance	
70 - 84	Preventative Maintenance	
60 - 69	Corrective Maintenance	
55 - 59	Rehabilitate	
40 - 54	Rehabilitate	
25 - 39	Reconstruct	
10 - 24	Reconstruct	
0 - 9	Reconstruct	

Asphalt surface treatment was
11 years old at time of 2004 inspection









Shishmaref Airport

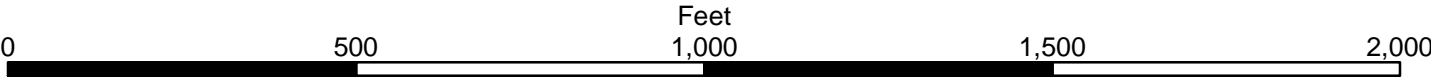
Pavement Condition Index (PCI) Predicted Values for the Year 2005

Airport Code: SHH
Site Number: 50701.01*A
[] Branch-Section Identifier



Minimum PCI for Runway = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations	
	85 - 100	Do Nothing or Preventative Maintenance
	70 - 84	Preventative Maintenance
	60 - 69	Corrective Maintenance
	55 - 59	Rehabilitate
	40 - 54	Rehabilitate
	25 - 39	Reconstruct
	10 - 24	Reconstruct
	0 - 9	Reconstruct



Shishmaref Airport

Pavement Condition Index (PCI) Predicted Values for the Year 2006

Airport Code: SHH
Site Number: 50701.01*A

[] Branch-Section Identifier

Runway 5-23
[6100]

Apron
[4100-01]

Taxiway A
[100-01]

gravel

[6100-05]









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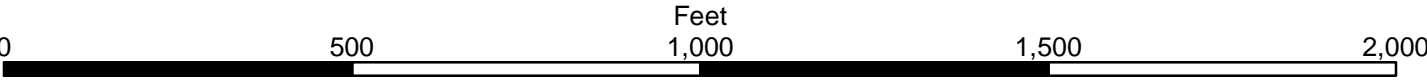
[6100-02]

[6100-03]

[6100-04]

Minimum PCI for Runway = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values		General Pavement Recommendations
	85 - 100	Do Nothing or Preventative Maintenance
	70 - 84	Preventative Maintenance
	60 - 69	Corrective Maintenance
	55 - 59	Rehabilitate
	40 - 54	Rehabilitate
	25 - 39	Reconstruct
	10 - 24	Reconstruct
	0 - 9	Reconstruct



Shishmaref Airport









Pavement Condition Index (PCI) Predicted Values for the Year 2007

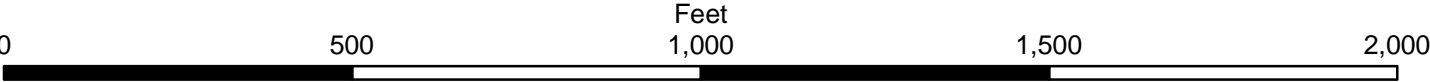
Airport Code: SHH
Site Number: 50701.01*A

[] Branch-Section Identifier



Minimum PCI for Runway = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations	
	85 - 100	Do Nothing or Preventative Maintenance
	70 - 84	Preventative Maintenance
	60 - 69	Corrective Maintenance
	55 - 59	Rehabilitate
	40 - 54	Rehabilitate
	25 - 39	Reconstruct
	10 - 24	Reconstruct
	0 - 9	Reconstruct



Shishmaref Airport

Pavement Condition Index (PCI) Predicted Values for the Year 2008

Airport Code: SHH
Site Number: 50701.01*A

[] Branch-Section Identifier

Runway 5-23
[6100]

Apron
[4100-01]

Taxiway A
[100-01]

gravel

[6100-05]









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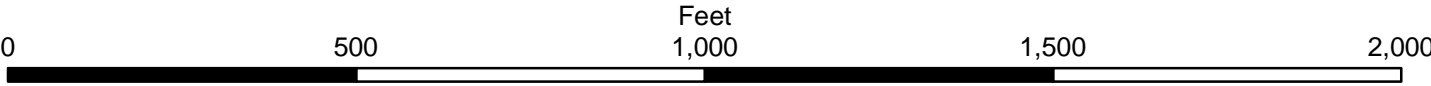
[6100-02]

[6100-03]

[6100-04]

Minimum PCI for Runway = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values		General Pavement Recommendations
	85 - 100	Do Nothing or Preventative Maintenance
	70 - 84	Preventative Maintenance
	60 - 69	Corrective Maintenance
	55 - 59	Rehabilitate
	40 - 54	Rehabilitate
	25 - 39	Reconstruct
	10 - 24	Reconstruct
	0 - 9	Reconstruct



Shishmaref Airport

Pavement Condition Index (PCI) Predicted Values for the Year 2009

Airport Code: SHH
Site Number: 50701.01*A

[] Branch-Section Identifier

Runway 5-23
[6100]

Apron
[4100-01]

Taxiway A
[100-01]

gravel

[6100-05]









[6100-01]

[6100-02]

[6100-03]

[6100-04]

Minimum PCI for Runway = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values		General Pavement Recommendations
	85 - 100	Do Nothing or Preventative Maintenance
	70 - 84	Preventative Maintenance
	60 - 69	Corrective Maintenance
	55 - 59	Rehabilitate
	40 - 54	Rehabilitate
	25 - 39	Reconstruct
	10 - 24	Reconstruct
	0 - 9	Reconstruct

5

23



0 500 1,000 1,500 2,000